

Memorandum of Agreement

between

NASA Integrated Services Network

and

NASA Headquarters

for

NISN Host Center Support

February / 2007

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NASA Headquarters
for
NISN Host Center Support

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Contents

1.	Introduction	1
1.1	Purpose.....	1
1.2	Scope.....	1
1.3	Reviews and Changes	1
2.	Applicable Documents and any subsequent versions.....	1
3.	Services	2
4.	Personnel	2
5.	Access and Badging.....	3
6.	Facilities.....	4
7.	Earth Station Lease Agreements.....	5
8.	Mission Essential Infrastructure Critical Infrastructure Interdependencies for NASA Assets	6
9.	Support Services and Resources	6
10.	Commercial Telecommunications Carrier Demarcations	7
11.	Requirements Planning, Implementation and Operation	8
12.	ViTS/VoTS Facility Modifications When Required	10
13.	Mission Services Implementation	11
14.	Mission Routed Data Connection Security Checklist	12
15.	Mission Services Operations Support	12
	Appendix A. NISN Standing Maintenance Windows.....	14
	Appendix B. Center Standing Maintenance Windows.....	15

Memorandum of Agreement between NASA Integrated Services Network and NASA Headquarters for NISN Host Center Support

1. Introduction

1.1 Purpose

The purpose of this Memorandum of Agreement (MOA) is to document agreements between the National Aeronautics and Space Administration (NASA) Integrated Services Network (NISN) and NASA Headquarters relating to NISN provided Wide Area Network and Telecommunications support at Headquarters.

1.2 Scope

NISN provides Wide Area data networking and telecommunication services to NASA Centers/programs/projects, operating locations, approved and sponsored contractor locations, international space agency partners, and affiliated universities. In providing these services, NISN relies on Host Center(s) to provide support for real property, facilities, and services (i.e., utilities and security). This MOA defines the services provided by NISN to NASA Headquarters and by NASA Headquarters to NISN as of the date of this MOA and specifies in one document the expectations between NISN and NASA Headquarters regarding this mutual support.

1.3 Reviews and Changes

This agreement shall be reviewed annually or as required for updates or changes. Changes shall be made only with the mutual consent of NISN's Project Office and NASA Headquarters. If either party wishes to discontinue or modify this agreement, at least 90 days' notice will be given to the other party via written notification.

2. Applicable Documents and any subsequent versions

- a. NISN-3000-4200, Rev 7, 20 Apr 2005, NISN Services Document (NSD)

Note: The current version of the NISN Services Document is available in the document repository located on the Internet's World Wide Web service at <http://www.nisn.nasa.gov>.

- b. NISN-SOP-0002, NASA Integrated Services Network (NISN) Standard Operating Procedure for Trouble Reporting, Activity Scheduling, Mission Freeze, Major Outage Notifications and Operating Level Agreements (OLA's)
- c. Project Service Level Agreements, negotiated annually
- d. NISN 3000-4527 DRAFT, NISN Service Request (NSR) Process

- e. Host Center Agreements for Mission Services
- f. NPR 1600.1, 28 Nov 2005, NASA Security Program Procedural Requirements
- g. NPD 1600.2D, 01 Feb 2006, NASA Security Policy
- h. NPR 1620.3, 12 Aug 2004, Physical Security Requirements for NASA Facilities and Property
- i. NPR 2800.1, Change 1, 17 Sep 03, Managing Information Technology
- j. NPD 2800.1A, 18 Aug 2004, Managing Information Technology
- k. NPR 2570.1, 24 Apr 2003, NASA Radio Frequency (RF) Spectrum Management Manual
- l. NPD 2570.5C, 2 Jul 2003, NASA Radio Frequency Spectrum Management
- m. NPR 2810.1A, 26 May 2006, Security of Information Technology
- n. NPD 2810.1C, 7 Apr 2004, NASA Information Security Policy
- o. NITR 2810-1, 15 Sep 2003, Wireless Requirements
- p. NITR 2810-2, 28 Jun 2004, Information Technology (IT) System Security Requirements
- q. NITR 2810-3, 28 Jun 2004, NASA Internet Publishing Content Guidelines

3. Services

- a. NISN shall provide Wide Area Network (WAN) telecommunications services in support of NASA operating locations, mission directorates, programs, and projects. NISN maintains a web page at <http://www.nisn.nasa.gov> that provides information on available NISN services as well as NISN contacts and other useful data.

4. Personnel

- a. NISN shall:
 - 1. Provide Civil Servant NISN Customer Interface Group (CIG) leads for each Center, Project and Mission Directorate.
 - 2. Provide contractor personnel to support the CIG and serve as NISN Customer Service Representatives (CSR) to their respective NASA Centers / Facilities. These personnel are available to facilitate the requirements development and planning process.
 - 3. Provide on-site contractor personnel support to the NISN WAN Gateways at NASA Centers / Facilities. These personnel are responsible for installation, operations, and maintenance of NISN provided equipment and circuits.
 - 4. Provide Requirements Planning, Engineering, Acquisition, Implementation, Installation, Operations, and Configuration Management personnel to actively work with each host organization to develop, implement, and operate data

networking and telecommunication solutions to efficiently meet its specific requirements.

b. NASA Headquarters shall:

1. Appoint a primary and alternative Civil Servant ("NISN Center Representative") to function as its Center Representative for matters involving NISN. In general terms, the NISN Center Representative should be a senior-level employee who is able to commit the organization in areas such as the communications networks budget, requirements for service, and policy. The functions of the NISN Center Representatives are as follows:

- (a) Gathering and verifying network requirements
- (b) Coordinating requirements with NISN Customer Interface Group (CIG)
- (c) Initiating requests for studies or cost estimates to the NISN organization
- (d) Receiving and facilitating the distribution of NISN information
- (e) Participating in center/program requirements reviews
- (f) Interfacing with the NISN Team
- (g) Coordinating local installation activities in support of NISN services
- (h) Facilitating facility modifications as required
- (i) Representing Center/Program at NISN Customer Forums
- (j) Facilitating validation of NISN billing information for services
- (k) Coordinating funding issues
- (l) Identifying issues and areas of concern
- (m) Providing contract evaluation input
- (n) Ensuring requirements provided to NISN and services provided to their center customers are consistent with Agency and Center policy

The NISN Center Representatives will require direct access to the local center CIO organization as well as other local organizations such as Facilities, Transportation, Chief Financial Officer, Program/project funding contacts, etc., at their respective centers/contractor site.

2. Provide on-site and/or on-call personnel to actively work with NISN personnel to develop, implement, and operate data networking and telecommunication solutions required by the center or one of its tenants.

5. Access and Badging

To provide NISN services, NISN employees, contractors, and vendors require access to Centers and facilities 365 days a year, 24 hours a day.

a. NISN shall:

1. Ensure that NISN personnel, or personnel conducting NISN business, meet Headquarters requirements for unescorted access to facilities. NISN will provide information to Headquarters as required, to gain access to the facility.
2. Provide requests for general escorted or unescorted access to Headquarters facilities at least 5 business days in advance unless access is mutually agreed to be an emergency.
3. Provide requests for escorted or unescorted access to Headquarters special access facilities at least 10 business days in advance.
4. Require NISN personnel, or personnel conducting NISN business to attend all training required to gain access to Headquarters facilities.
5. When available, NISN employees, contractors, and vendors with Headquarters badges and/or Personnel Reliability Program (PRP) authorization will escort and monitor any NISN employees, contractors, and vendors that do not have Headquarters badges and/or PRP or individuals that are awaiting PRP authorization.

b. NASA Headquarters shall:

1. Provide NISN employees, contractors, and vendors access to areas required to support Headquarters NISN services.
2. Provide requirements and procedures necessary for gaining access to site/facility so that NISN may distribute the information to NISN employees or vendors that require access to Headquarters facilities.
3. Ensure NISN employees are included on list of employees allowed immediate access to the site/facilities immediately after a disaster.
4. Provide any specialized access training required for access to site or facilities.
5. Provide Personnel Reliability Program (PRP) paperwork and authorization for NISN employees, contractors, and vendors at each location that utilizes NISN services, consistent with Headquarters and Agency policy.
6. Provide points of contact that will be available during days and hours agreed to by NISN and Headquarters to escort non-badged NISN personnel, contractors, or vendors into Center facilities or into areas requiring special badges (i.e., PRP), in the event that badged NISN personnel are not available to allow NISN to maintain and operate its services at Headquarters

6. Facilities

NISN use of Center real property and facilities is for the mutual benefit of Headquarters and NISN for the delivery of data and telecommunications services required by Headquarters. These facilities and real property may be used by NISN for the installation of telecommunications equipment, personnel offices, and storage. Use of this real property and facilities by NISN

includes use (1) by contractor personnel supporting NISN's customer service, operations and maintenance activities for Headquarters and (2) for the installation of equipment and services contracted for by NISN in response to Headquarters requirements.

a. NISN shall:

1. Coordinate with and obtain approval of the Headquarters NISN Center Representative before requesting modifications to the NISN-occupied real property, facilities, and supporting utilities from the appropriate host organization.
2. Follow standard Headquarters and Agency policies that govern the use of real property on a center or contractor site. It is the responsibility of NASA contractors to manage its sub-contractors and vendors, and to provide accurate and timely documentation to the authorized NASA center and/or contractor liaison for real property.

b. NASA Headquarters shall:

1. Provide environmentally controlled office space for the NISN Customer Service Representative (CSR) in a location that is conducive to holding private discussions about NISN services.
2. Provide NISN the use of the real property, facilities, and environmental controls described below for the NISN WAN Gateway:
 - (a) NISN Gateway - Room CN31, (approximately 2200 sq.ft)
 - (b) Vehicle parking space co-located with the facilities occupied and/or used by NISN personnel, per Headquarters requirements, processes, and priority.
 - (c) Electrical power with UPS, Emergency Generator service adequate to support NISN assets.
 - (d) Adequate HVAC to the facilities provided to NISN for equipment installation and operation. The temperature and humidity levels must be in accordance with vendor recommended system operation environmental parameters.

7. Earth Station Lease Agreements

a. NISN shall:

1. Manage the contractual agreements for the satellite Earth Stations. Coordinate with Headquarters or the appropriate Center when negotiating Earth Station lease agreements to ensure Headquarters and/or Center interests and issues are addressed.
2. Provide information required for Headquarters and/or Center to obtain frequency clearances.

b. NASA Headquarters shall:

1. Provide real property and facilities support to NISN as appropriate.

2. Obtain necessary approval(s) for NISN to operate in specified frequencies.

8. Mission Essential Infrastructure Critical Infrastructure Interdependencies for NASA Assets

Based on criteria found in NPR 1600.1, Appendix H, there are two types of assets that should be considered for MEI “protection”. One asset is the facilities and services themselves that are required for NASA to function (deemed MEI to NASA). The second asset to be considered is critical infrastructure or interdependencies that MEI classified systems or services rely upon to be fully functional. These assets do not necessarily have to be classified as MEI but they do require the same protection scheme. (This information is contained in NPR 1600.1 Appendix H in section 4). The NISN Gateway falls under the category of an MEI interdependency. Since each center houses one of the NISN gateways in its facilities, those assets need to be considered and included in the center Continuity of Operations and Disaster recovery plans.

a. NISN shall:

1. Identify NISN assets for inclusion in Headquarters Continuity of Operations and Disaster recovery plans.
2. Provide specifications necessary for Headquarters to allocate facility, power, and HVAC required to support critical NISN assets.

b. NASA Headquarters shall:

1. Provide disaster recovery floor space for three rack/cabinets in the NASA Headquarters Computer Center (NHCC), or – if the NHCC is also impacted by the same incident – an alternate location mutually determined by Headquarters and NISN.
2. Provide available recovery space immediately after a disaster and insure availability of recovery space for as long as needed.
3. Provide electrical power adequate to support NISN assets.
4. Provide a Headquarters point of contact for disaster recovery activities.
5. When the impacted area has been deemed safe to enter, ensure NISN personnel are provided access to Headquarters NISN facilities immediately following a disaster.

9. Support Services and Resources

a. NISN shall:

1. Provide CSR(s) and Gateway Techs with MSFC ODIN personal laptop computers.
2. Ensure compliance with NPR 2810 and NITR 2810-2 guidelines for connection approvals and acceptable use of Agency Information Technology (IT) resources

for all systems attached to NISN provisioned networks within the NISN Gateway and/or approved locations at Headquarters.

b. NASA Headquarters shall:

1. Provide administrative communications such as: Local Area Network (LAN), telephones, and facsimile, to support daily operations at Headquarters.
2. Provide security, emergency medical care, and fire protection on the same level and scale as provided to all occupied locations and personnel at Headquarters.
3. Provide continuous access to Headquarters by NISN personnel.
4. Provide parking space co-located with the facilities occupied and/or used by NISN personnel, per Headquarters requirements, processes, and priority. NISN or NISN Personnel are responsible for all parking fees.
5. Provide routine janitorial service and maintenance of the building, grounds, and facilities designated for NISN use.
6. Provide emergency electrical back up power (UPS and Emergency Generator).
7. Provide access to local safety, work order, and work processing systems required to accomplish daily business.
8. Provide access to site administrative services such as; color printers, print shop, photographic support, copiers, and supplies.
9. Provide shipping, receiving, and transportation services as required for accomplishing daily business.
10. Provide office supplies and furniture (i.e., paper, toner, pens, chairs, desk, credenzas, etc.) as available at Headquarters.
11. Provide access to site health care services at Headquarters
12. Provide a safe and clean work environment.
13. Provide host center support in the areas of real property, facilities, and services (i.e. utilities, shipping, receiving, medical services, supplies, and transportation, and security) as required to facilitate the implementation and operations of the NISN provided services.
14. Provide Public Switched Telephone Network (PSTN) modem lines at designated NISN locations within Headquarters to support the Enterprise Management Center.
15. Install spare CLNE at the direction of AT&T to minimize delays with callout and dispatch of maintenance personnel once a trouble is identified and isolated.

10. Commercial Telecommunications Carrier Demarcations

NISN contracts with and relies upon commercial telecommunications carriers for information transport services.

a. NISN shall:

1. Initiate and coordinate negotiations between Headquarters and the common carrier for the installation of new cabling or equipment by a carrier at the Headquarters facility.
2. Initiate and coordinate discussions between the Headquarters and the common carrier for negotiation of right-of-ways.
3. Coordinate with and obtain approval from the appropriate Headquarters personnel for each requirement to extend NISN provided services from the NISN or commercial demark to users, activities, and/or offices at the Headquarters.

b. NASA Headquarters shall:

1. Allow commercial telecommunications carriers to provide services to NISN occupied real property and facilities, or to such other demarcation points as may be agreed upon, and to install such cabling and equipment as may be necessary to provide NISN with the services contracted for in order to meet host organization WAN service requirements.
2. Identify the Headquarters point of contact for the local carrier to notify when installing NISN services at Headquarters facilities.
3. Execute NISN and Headquarters approved lease agreements with commercial telecommunications carriers for their use of Headquarters facilities.
4. Provide access and connectivity to the Headquarters communications, cabling, and wiring systems as required for the purpose of extending NISN provided services to users, activities, and/or offices at Headquarters facilities.

11. Requirements Planning, Implementation and Operation

a. NISN shall:

1. Provide a process for submission of requirements for services to each center. This process for requesting services is fully described in the NSD which is available at <http://nisen.nasa.gov> under the section on submitting NISN Service Requests (NSR).
2. Initiate annual requirements reviews of all NISN requirements.
3. Provide information as requested to assist Headquarters in processing changes through the local Configuration Control Board (CCB). Perform IT and telecommunications changes only upon approval by Headquarters CCB. In the event of conflict between NISN and Headquarters policies, NISN will work diligently with Headquarters to resolve issues.
4. Attend local meetings, whenever possible, on a standing or invitation basis to help facilitate information flow between NISN and NISN customers.
5. Provide the center/projects annual funding methodology and updates.

6. Advise the center/projects of any new NISN Service offerings.
7. Immediately notify appropriate Headquarters personnel of any problems discovered requiring unscheduled downtime.
8. Inform Headquarters of any major scheduled outage that will impact the Headquarters end-users.
9. Present information regarding NISN services outages at the Headquarters IT Daily Tag-Up meeting. Provide Headquarters personnel with additional information as requested.

b. NASA Headquarters shall:

1. Submit requirements for services using the established NISN procedures to include necessary security plan, funding strategy, and reasonable delivery timeline.
2. Ensure compliance with NPR 2810 and NITR 2810-2 guidelines for connection approvals and acceptable use of Agency Information Technology (IT) resources.
 - A NISN connection only exchanges data between end user locations/systems
 - The sensitivity of unencrypted data exchanged between user locations via the NISN connection is Sensitive-But-Unclassified
 - Secure information being passed on the NISN provided network connections must be protected through the use of FIPS 140-2 approved encryption mechanisms. It is the responsibility of the Headquarters, the end user organization, and end user to ensure this requirement is met.
 - All end users/organizations utilizing a NISN connection are expected to comply with the Privacy Act and Trade Secrets Act (18 U.S. Code 1905) and the Unauthorized Access Act (18 U.S. Code 2701 and 2710).
 - Upon discovering a security incident involving the NISN connection, the end user/Headquarters representative will initiate the Headquarters Incident Response Process. The NASA Information Support Center (NISC) shall receive notification of the security incident through established processes and procedures.
 - Maintain responsible for monitoring and auditing application processes, and network IT Security events for Headquarters devices that utilize the NISN provided network connections.
 - Headquarters is responsible for ensuring that all tail sites connected behind the Headquarters border router are in compliance with appropriate Federal and Agency regulations and requirements.
3. Conduct annual and ad hoc review of all Headquarters related NISN requirements.

4. Provide notification to, and coordinate Headquarters activities that will, or may have an impact on services provisioned through NISN, or services at Headquarters that are accessed through NISN based services. Headquarters will provide this information and activity coordination through the NISN Customer Service Representative that is located at Headquarters.
5. Provide support, access, and information for site surveys as necessary for NISN to develop design, costs, and schedules for requirements.
6. Escalate to the NISN Customer Service Representatives or NISN Management, as appropriate, any end-user concerns regarding planned outage date(s), time(s), or impact.

12. ViTS/VoTS Facility Modifications When Required

ViTS/VoTS services often require a need for local facilities work to satisfy customer needs. This work requires extensive coordination and cooperation between NISN Center Representatives, NISN CSRs, Local Facilities personnel, and local contractors.

a. NISN shall:

1. Provide local facilities personnel with drawings, specifications, and technical assistance.
2. Conduct site surveys to identify facilities requirements
3. Coordinate and communicate facilities requirements as early as possible so as to reduce impact to service delivery schedules.
4. Provide the necessary cabling and/or hardware and instructions, for any required asbestos work, however, NISN provides no asbestos expertise. NISN will not work in any area where asbestos hazards have not been abated.
5. Provide heating and cooling specific BTU's requirements for each project requiring local HVAC
6. Provide specific structural specifications for wall stiffing and ceiling mounted devices
7. Fabricate/cut openings in tables for installation of electronic interface boxes and drill holes in tables for cable installations

b. NASA Headquarters shall

1. Coordinate with designated NISN Customer Service Representative (CSR) and/or assigned engineer assigned to a specific task during all installations.
2. When possible and economically feasible, provide cable access pathways and AC power as specified in drawings provided by NISN.
3. When ample facility resources are available, install all AC power that feeds NISN equipment on the same electrical phase and ground.

4. Provide surge suppression, filtering, and UPS when available depending on facility. Notify NISN if the power requirements cannot be met.
5. Provide standard office space/conference room independently controlled heating and air conditioning. If additional HVAC capacity is required, NISN funding may be required to provide this capability.
6. Maintain appropriate level of (HVAC) sound dampening to facilitate meetings and conferences. The acoustical levels must not exceed 52db of ambient noise during room operations. If additional HVAC sound dampening is required then Headquarters funding may be required to provide this capability depending on each situation.
7. Provide core drills and conduit when required for extending cabling under floors or within walls. If core drills are required, Headquarters funding and coordination with customer may be required to provide this capability.
8. Mount NISN equipment per NISN specifications including video monitors, and provide reinforcement when necessary. It is a NISN responsibility to provide center with instructions on mounting to different types of structures.
9. Provide installation and relocation of NISN provided ceiling mounting brackets for cameras, video monitors, and projectors at locations provided by NISN. NISN is responsible for providing Headquarters with equipment-mounting specifications and instructions on mounting to different types of structures as required.
10. Fabricate and/or relocate camera boxes (installed within walls) as per specifications provided by NISN. If fabrication is required, Headquarters funding and coordination with customer may be required to provide this capability.
11. Provide cut floor tiles when floor boxes and electrical connections are required to be installed in a raised floor. If fabrication and labor are required, Headquarters funding and coordination with customer may be required to provide this capability.

13. Mission Services Implementation

In most cases, Mission Services require a higher level of attention to support real and near real time operations. They often utilize site personnel to perform or assist with installations. Centers must take this requirement into account when supporting Mission Services. Additionally, many Mission requirements are time sensitive and require prompt responses from site personnel in order to meet established customer installation dates.

NISN shall:

1. Ensure that appropriate NISN Mission Service is coordinated with the designated Center Representative and approved by the Center Mission Representative for the Mission building complex.

2. Coordinate with center/project the end-to-end engineering associated with new implementations, modifications and upgrades to existing services.
3. Provide the center/project with status of requirement or implementation of the service.

NASA Headquarters shall:

1. Ensure that each NISN Mission Service is coordinated with and approved by the appropriate Center Mission Representative for the Mission building complex.

Center Mission Representative shall:

1. Ensure that each NISN Mission Service is coordinated with the designated NISN Center Representative.

14. Mission Routed Data Connection Security Checklist

All connections to NISN IONET require completing a security checklist before the connection is made. To prevent delaying implementation of service, the customer will begin work on this checklist at the time of requirement submittal. Refer to NPR 2810.1A, NITR 2810-2 and the IONET Access Policy (provide location for document) for more information.

15. Mission Services Operations Support

Mission Operations typically have higher restoral and problem identification/resolution service levels (2hours and < 1 minute) which often require 24 x 7 on-site support to successfully meet restoration times. Since NISN personnel do not reside in Mission Customer Facilities, the NISN equipment is managed by NISN remotely and NISN is not staffed onsite to provide this support. Therefore, NISN must rely on Host Center Communications personnel to provide this on-site support for NISN circuit and equipment troubleshooting (to include use of test sets), resets, vendor escort, etc.

a. NISN shall:

1. Provide a list of equipment and circuits subject to site support.
2. Provide a list of NISN standing maintenance windows and provide advance notification of scheduled downtime.
3. Immediately notify appropriate Headquarters personnel of any problems discovered requiring unscheduled downtime.
4. Provide NISN Freeze policies.
5. Provide intercenter operational communication circuits and services with an established interface.
6. Assure/coordinate end-to-end circuit engineering.
7. Provide end-to-end operational technical control.

8. Identify and coordinate implementation of all new requirements with user/requester.
 9. Identify to NASA Headquarters any new communication circuits and/or services requirements.
 10. Schedule all NISN services for major test and when special manning is required.
 11. Have appropriate test equipment available for troubleshooting of NISN Mission circuits and equipment.
 12. Provide Headquarters, in advance, a list of any Center personnel, support, or equipment requirements needed before any testing or scheduled maintenance is performed.
 13. GSFC shall request, and authorize AT&T to troubleshoot and reconfigure NTR equipment. If vendor personnel are required to be dispatched for on site work, GSFC and AT&T shall adhere to Headquarters access policies and procedures.
 14. Troubleshooting of the leased circuits and NTR equipment may require turning control of the equipment to AT&T. To insure test signals or loop back do not interfere with NASA Headquarters operations, it is GSFC responsibility to notify NASA Headquarters of such outages, reroute circuits or services, or terminate circuits/services in the NISN network. If the above action is not possible; GSFC shall contact Headquarters and provide instructions for protecting systems. This may include instructions to disconnect circuits and/or services.
- b. NASA Headquarters shall:
1. Have communications personnel with strong communications knowledge and experience to support troubleshooting efforts.
 2. Be able to support around the clock operations.
 3. Provide lists of on call personnel.
 4. Provide date and time of standing Headquarters maintenance windows.
 5. Provide Headquarters specific freeze policies.
 6. Provide limited operations and maintenance of NISN-leased AT&T equipment installed in the NASA Headquarters facility.
 7. Coordinate with NISN and local communications organizations for implementation of all new circuit installations, activations, and testing.
 8. Provide technical support personnel during scheduled tests and when special manning is required.

Appendix A. NISN Standing Maintenance Windows

NISN has established a routine Preventative Maintenance (PM) window in order to perform actions necessary to maintain the health of the Mission Communications Network Infrastructure and Services. During these windows, there may be minor impacts to NISN Mission Services. Preventative Maintenance will not be performed during NISN Freezes and Critical Coverage Periods. NISN Network Scheduling Group (NNSG) Activity Notices will be sent to customers as a reminder of the activity and its potential impact to services five days in advance of the routine PM window. To be included in the NNSG Activity Notices, please e-mail nmsg@ncc-comm.gsfc.nasa.gov and include information about what project you support and which NISN services you utilize.

Preventative Maintenance Windows for NISN Mission Routed Data Services are scheduled every Tuesday from 1800Z to 1830Z. During these standing PM windows, customers on IONET can expect to see one or more minor hits lasting a few seconds. There is no impact expected for TCP/IP data flows, and there will be no loss of connectivity. Multicast/UDP data flows may drop blocks during those few seconds. Customers who may be sensitive to the impact as described above are encouraged to take this preventative maintenance window into account when scheduling support services.

During the PM Window, activities may be scheduled which have a larger impact to a limited number of customers. These activities will be scheduled separately through the standard NISN Network Scheduling Group (NNSG) briefing process and coordinated with the impacted customers.

Routine PM Windows have not yet been established for other NISN Mission Communications Services. When they are established as determined by need, the same process will be followed as is described above for Mission Routed Data Services. For any questions regarding PMs, you may contact the UNITEs Mission Operations Manager Norman Reese (norman.reese@nasa.gov) at 301-286-6486 or the NISN Mission Operations Manager Victoria Stewart (vicki.stewart@nasa.gov) at 301-286-6205.

Standing PM windows are not currently established for NISN Mission Support services. Windows for performing actions necessary to maintain the health of the Mission Support Network Infrastructure and the various services are scheduled and coordinated in accordance with standard NISN policies and procedures on a case by case basis.

Please see NISN-SOP-0002, NASA Integrated Services Network (NISN) Standard Operating Procedure for Trouble Reporting, Activity Scheduling, Mission Freeze, and Major Outage Notifications, for detailed information concerning the above referenced NISN Mission and Mission Support operational policies and procedures.

Appendix B. Center Standing Maintenance Windows

There are no standing Headquarters Maintenance Windows.